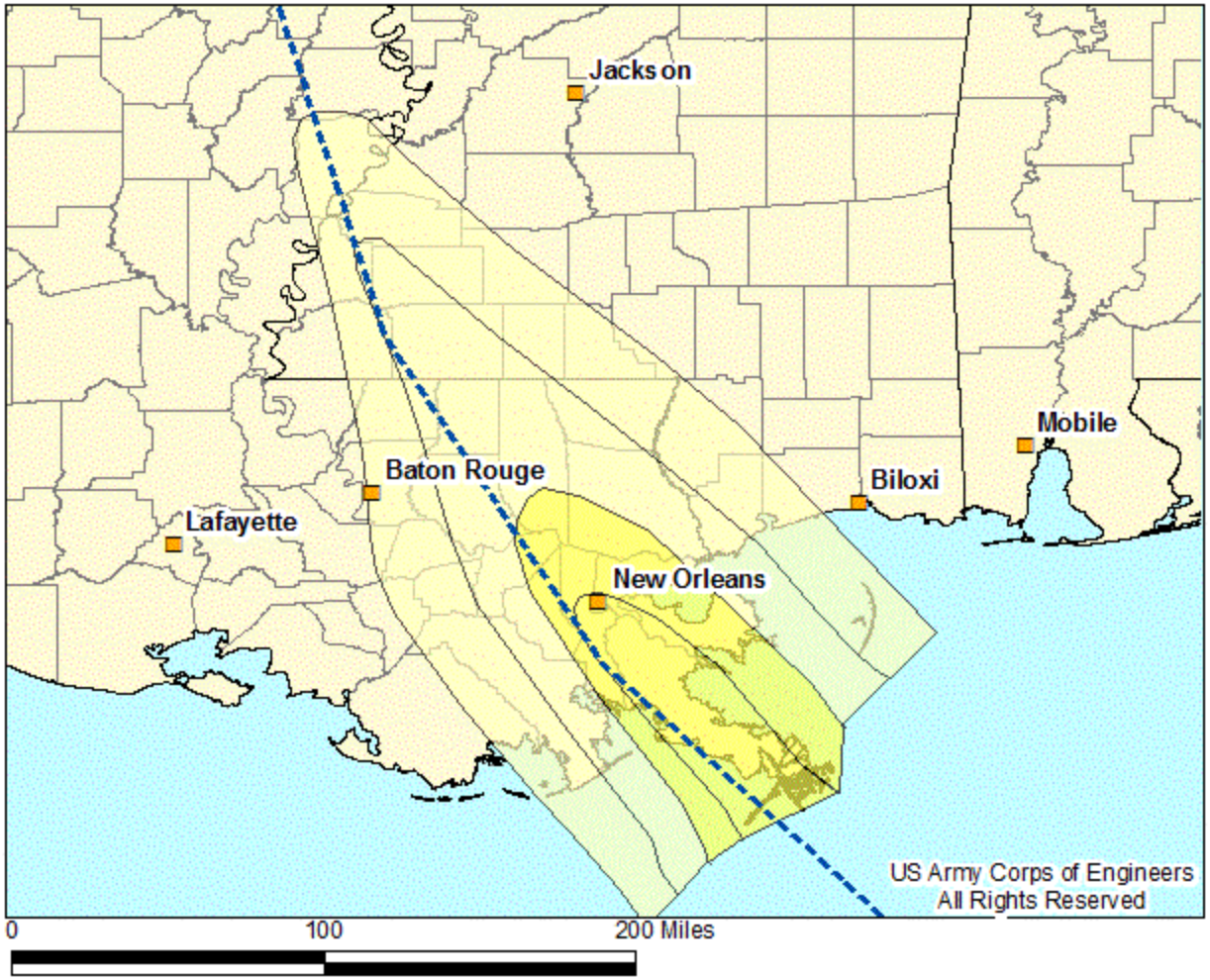
US Army Corps of Engineers

Hurricane Isaac Projected Damage Areas

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Projected Damage Areas

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

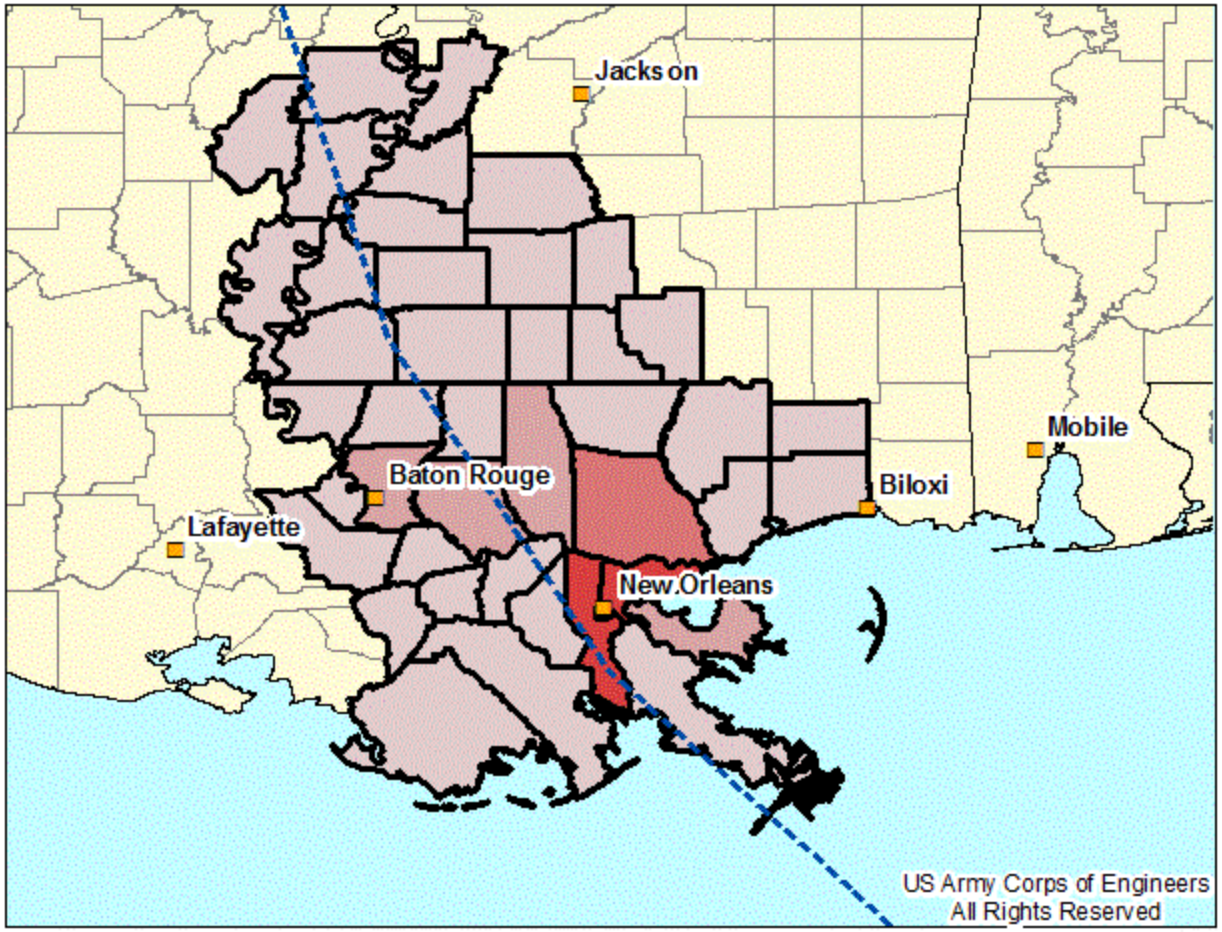
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 3,198,000 Yards
Mississippi - 334,000 Yards

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Debris Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Louisiana		Ascension Parish	62,000
		Assumption Parish	6,000
		Concordia Parish	< 1,000
		East Baton Rouge Parish	217,000
		East Feliciana Parish	14,000
		Franklin Parish	< 1,000
		Iberville Parish	3,000
		Jefferson Parish	810,000
		Lafourche Parish	84,000
		Livingston Parish	126,000
		Madison Parish	< 1,000
		Orleans Parish	870,000
		Plaquemines Parish	97,000
		St. Bernard Parish	136,000
		St. Charles Parish	78,000
		St. Helena Parish	18,000
		St. James Parish	14,000
		St. John the Baptist Pari	50,000
		St. Tammany Parish	327,000
		Tangipahoa Parish	158,000
		Tensas Parish	5,000
		Terrebonne Parish	70,000
		Washington Parish	53,000
		West Baton Rouge Parish	< 1,000
		West Feliciana Parish	< 1,000
Louisiana	3,198,000		
Mississippi		Adams County	16,000
		Amite County	21,000
		Claiborne County	4,000
		Copiah County	< 1,000

State	Yards per State	County	Yards per County
Mississippi		Franklin County	10,000
(continued)		Hancock County	72,000
		Harrison County	79,000
		Jefferson County	6,000
		Lawrence County	< 1,000
		Lincoln County	13,000
		Marion County	3,000
		Pearl River County	65,000
		Pike County	29,000
		Stone County	< 1,000
		Walthall County	10,000
		Warren County	< 1,000
		Wilkinson County	6,000
Mississippi	334,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Debris Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

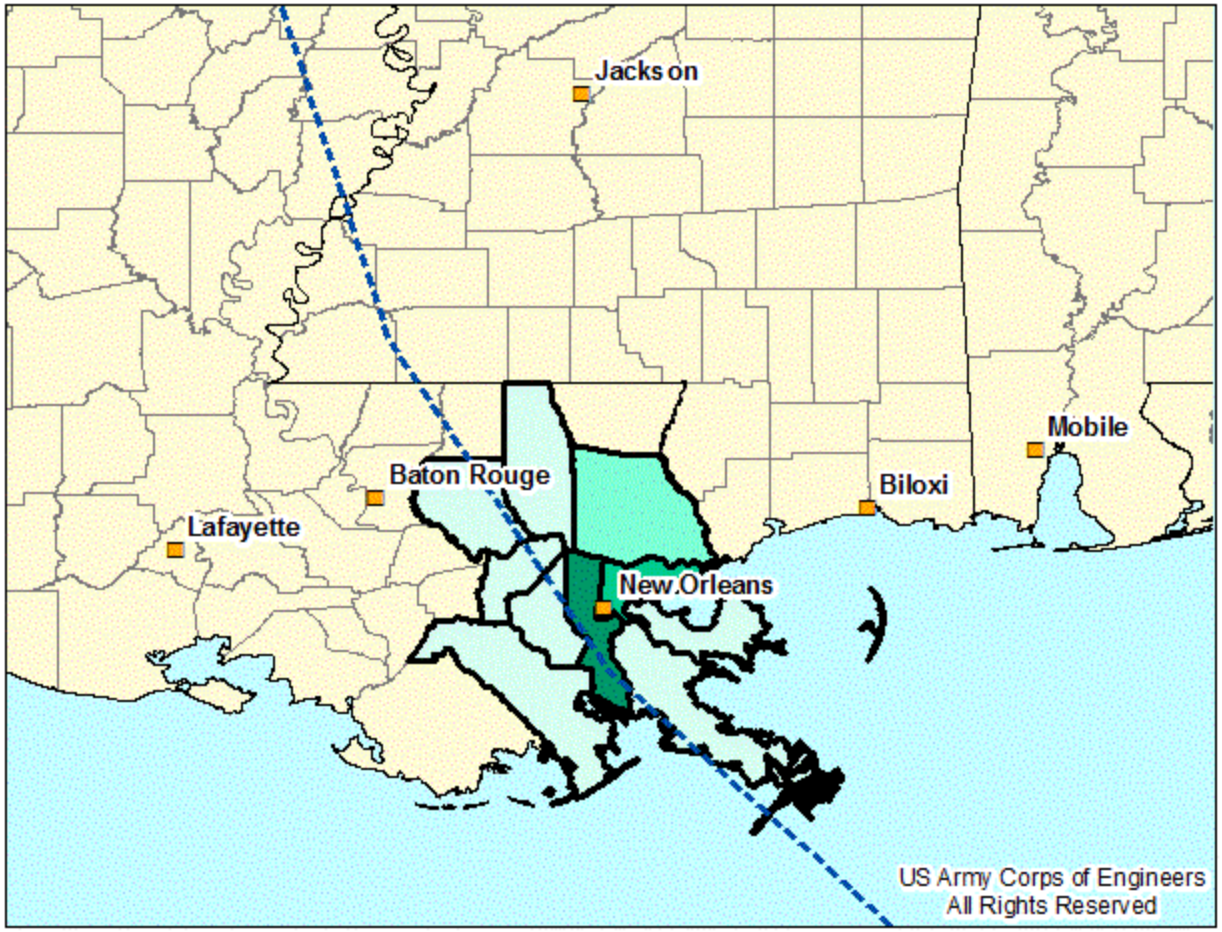
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 15/30/58 Truckloads

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC ***(0500 EDT 08/27/2012)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 18

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Jefferson Parish	22
		Lafourche Parish	1
		Livingston Parish	1
		Orleans Parish	19
		Plaquemines Parish	2
		St. Bernard Parish	3
		St. Charles Parish	3
		St. John the Baptist Pari	1
		St. Tammany Parish	5
		Tangipahoa Parish	1
Louisiana	58		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

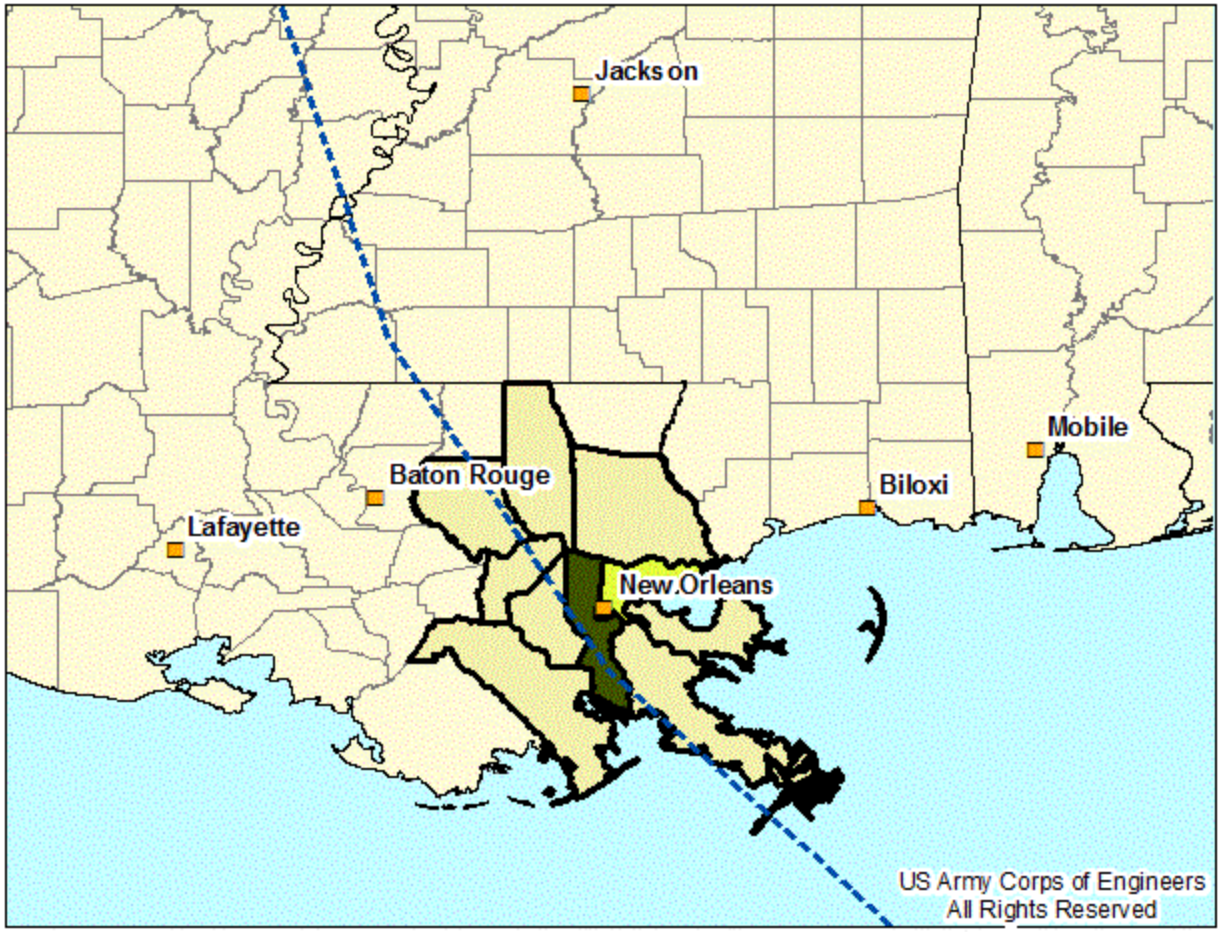
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Louisiana - 7,800

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast. Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Roofing Model	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 18

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Jefferson Parish	3,700
		Lafourche Parish	< 100
		Livingston Parish	< 100
		Orleans Parish	2,300
		Plaquemines Parish	300
		St. Bernard Parish	400
		St. Charles Parish	400
		St. John the Baptist Pari	< 100
		St. Tammany Parish	500
		Tangipahoa Parish	200
Louisiana	7,800		

Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Roofing Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

Post Landfall Temporary Housing Model Results

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast. Temporary housing is based on nothing. The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Housing Model	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County

Temporary housing is based on nothing.
The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Housing Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

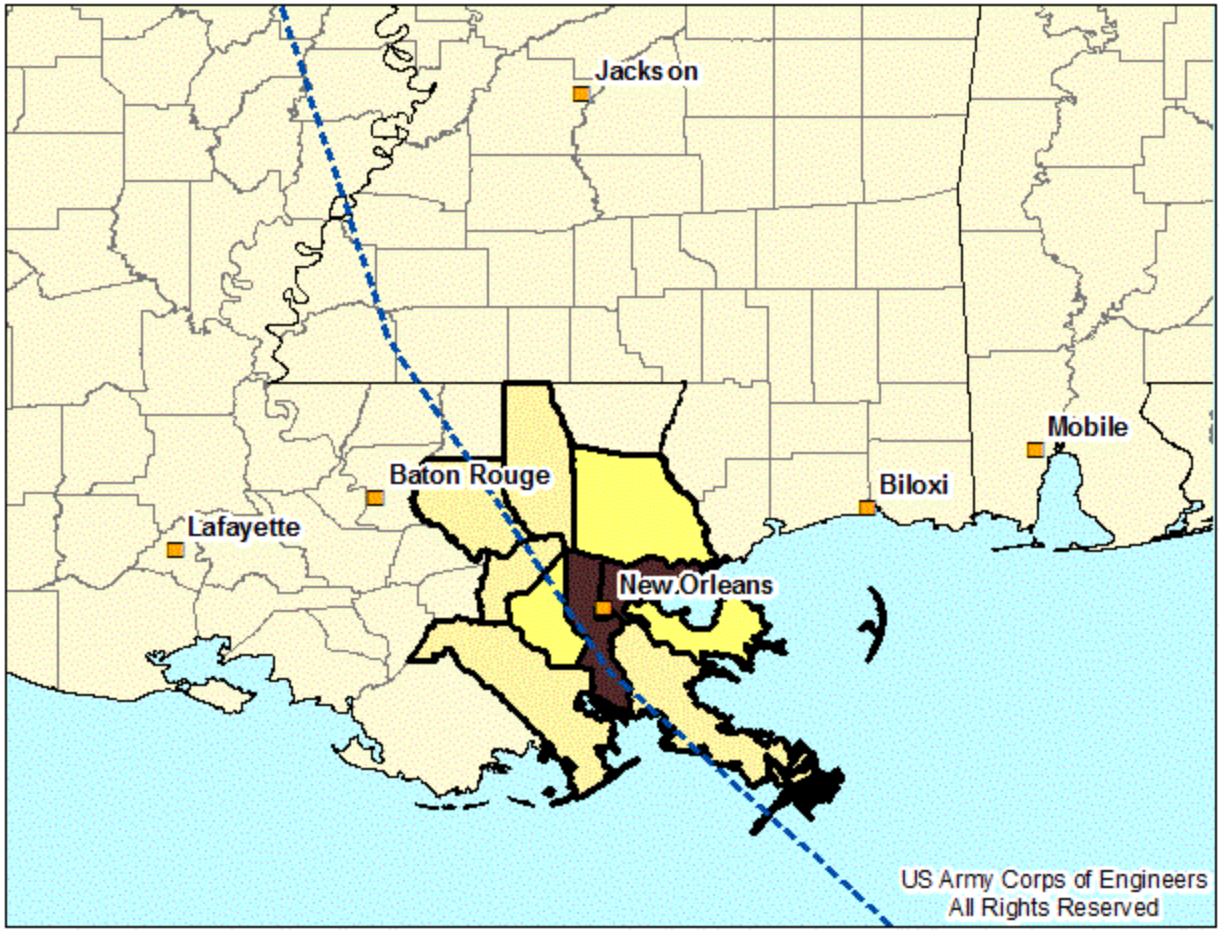
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Louisiana - 971,000

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Population Model	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Jefferson Parish	432,000
		Lafourche Parish	< 1,000
		Livingston Parish	< 1,000
		Orleans Parish	362,000
		Plaquemines Parish	24,000
		St. Bernard Parish	40,000
		St. Charles Parish	35,000
		St. John the Baptist Pari	2,000
		St. Tammany Parish	62,000
		Tangipahoa Parish	14,000
Louisiana	971,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Population Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

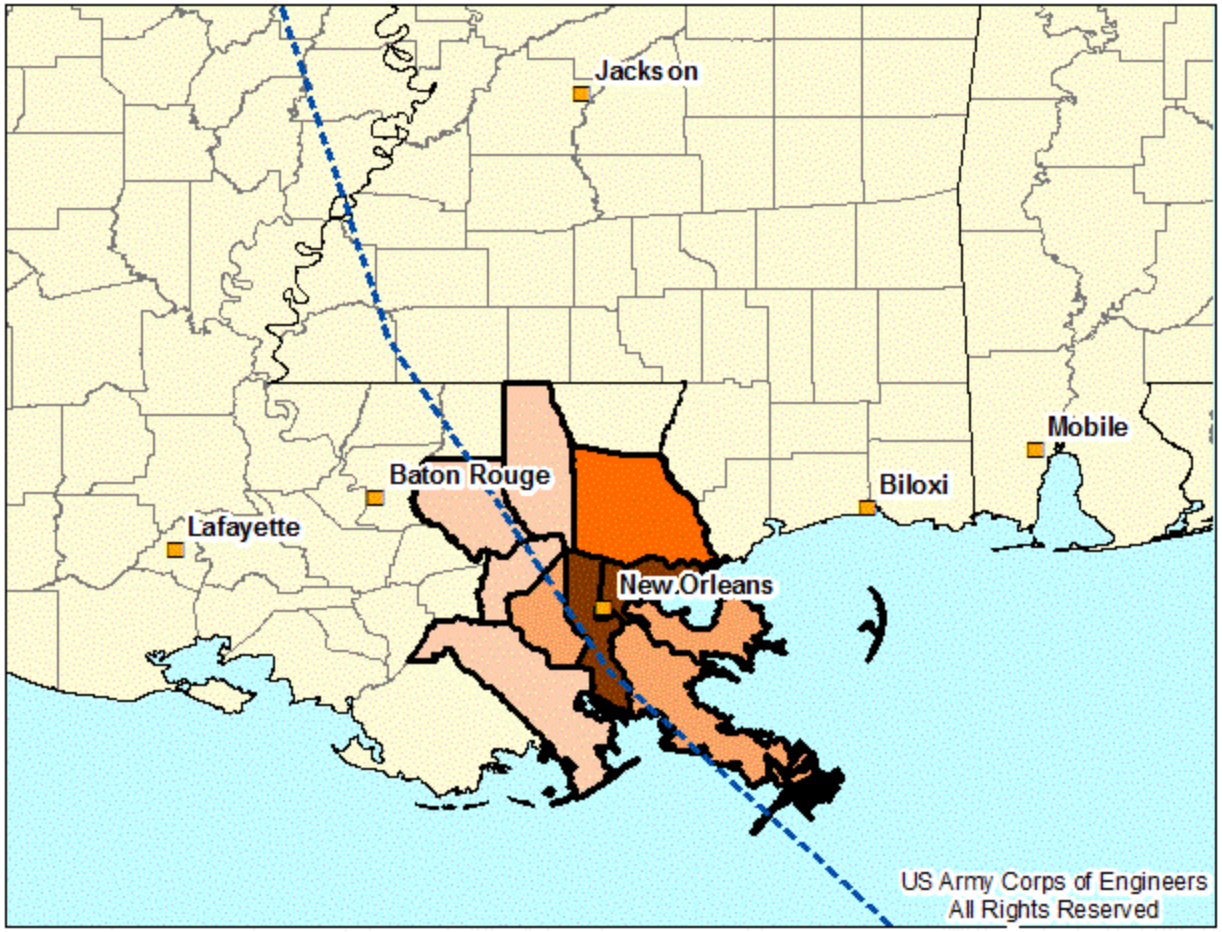
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Post Landfall Households Model Results

Louisiana - 372,000

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Households Model	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 18

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 38 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Jefferson Parish	167,000
		Lafourche Parish	< 1,000
		Livingston Parish	< 1,000
		Orleans Parish	141,000
		Plaquemines Parish	8,000
		St. Bernard Parish	15,000
		St. Charles Parish	12,000
		St. John the Baptist Pari	< 1,000
		St. Tammany Parish	23,000
		Tangipahoa Parish	6,000
Louisiana	372,000		

The number of households estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Households Model

Generated By:
Siemsen, LRL 0700 EDT 08/27/2012

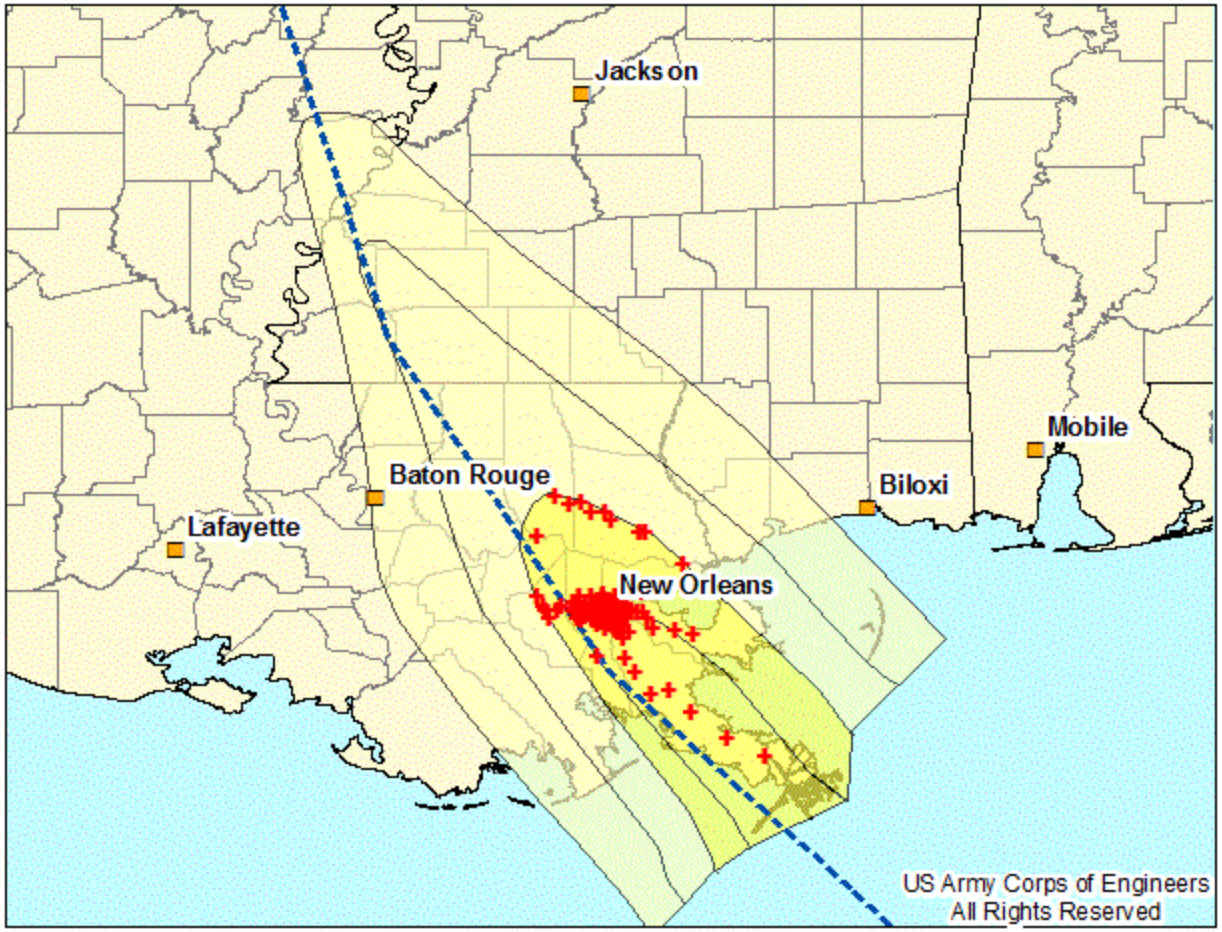
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Fire Stations

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Louisiana - 105

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

+ Fire Stations

Forecast Track

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

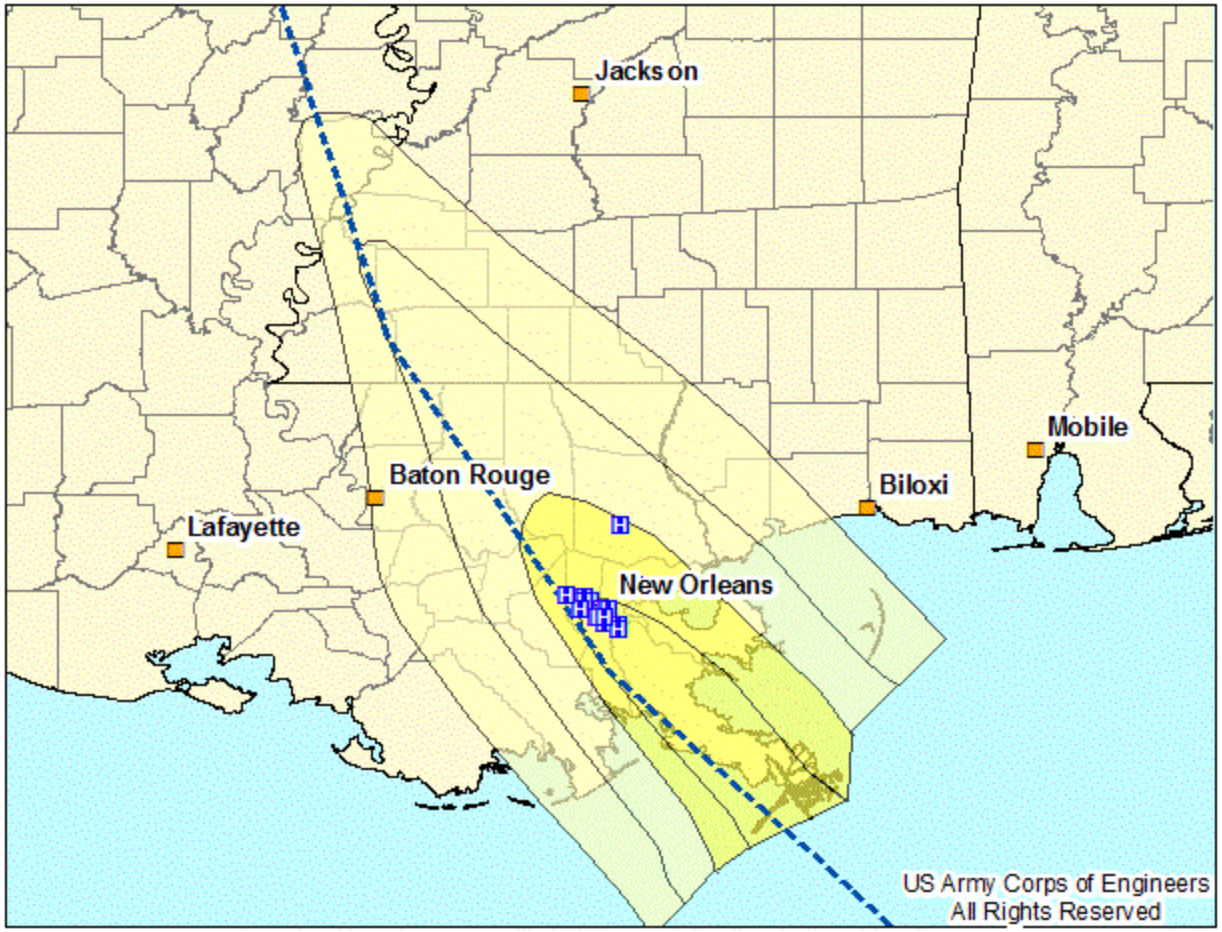
Hurricane Isaac Fire Stations	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Hospitals

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Most Probable Landfall Hospitals Inside Hurricane Force Winds

Louisiana - 25

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

H Hospitals

Forecast Track

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

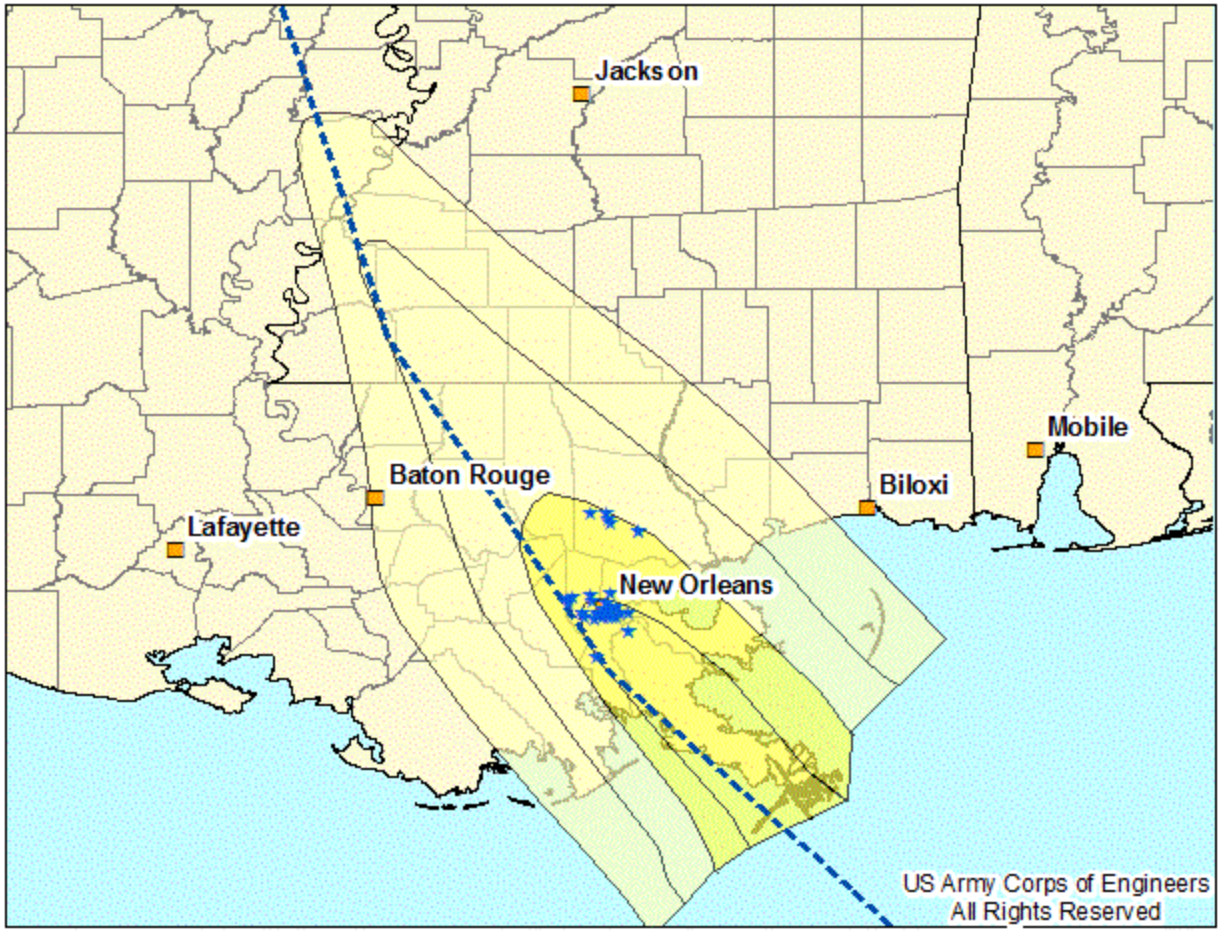
Hurricane Isaac Hospitals	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane Isaac Law Enforcement

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Louisiana - 39

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

★ Law Enforcement

Forecast Track

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

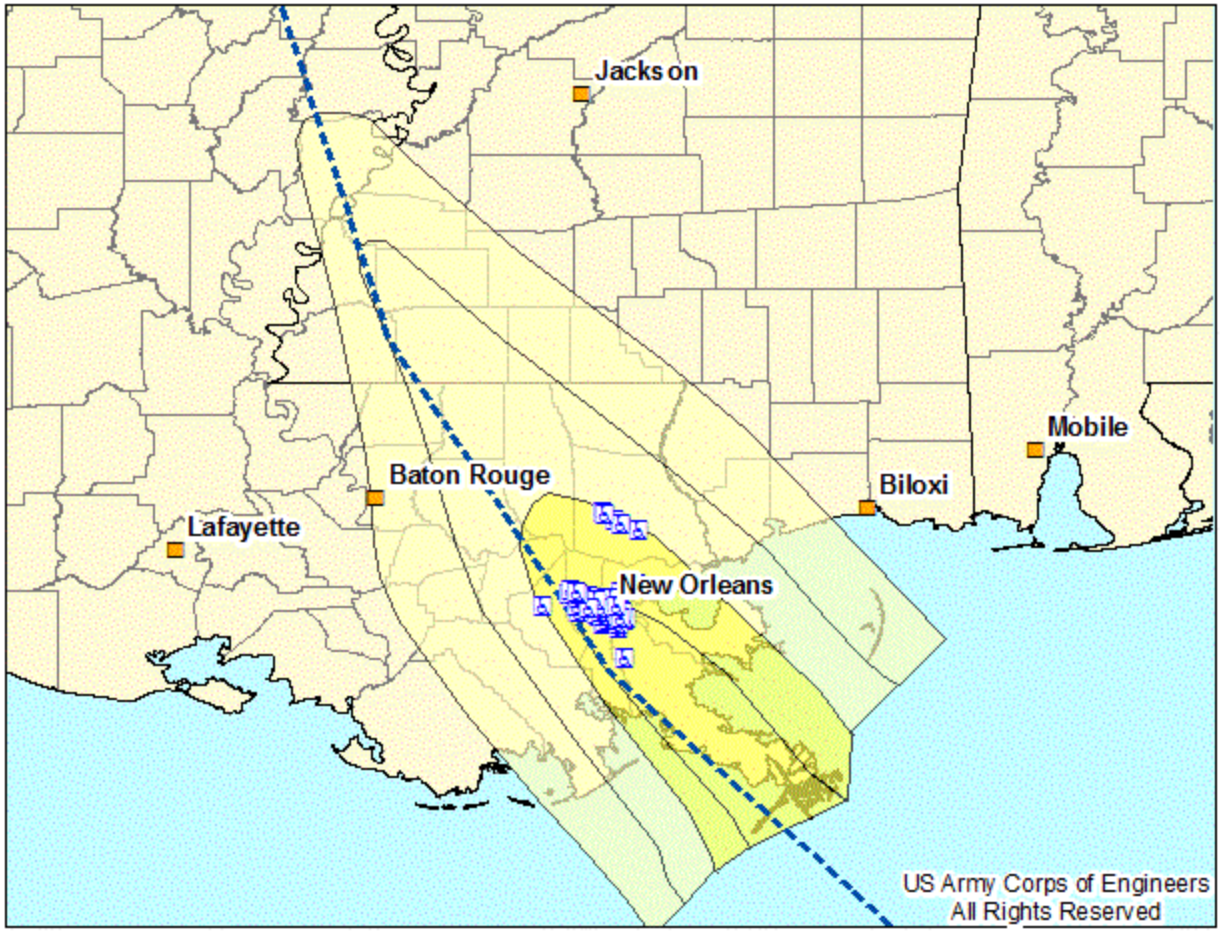
Hurricane Isaac Law Enforcement	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Nursing Homes

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Louisiana - 63

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Nursing Homes

Forecast Track

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

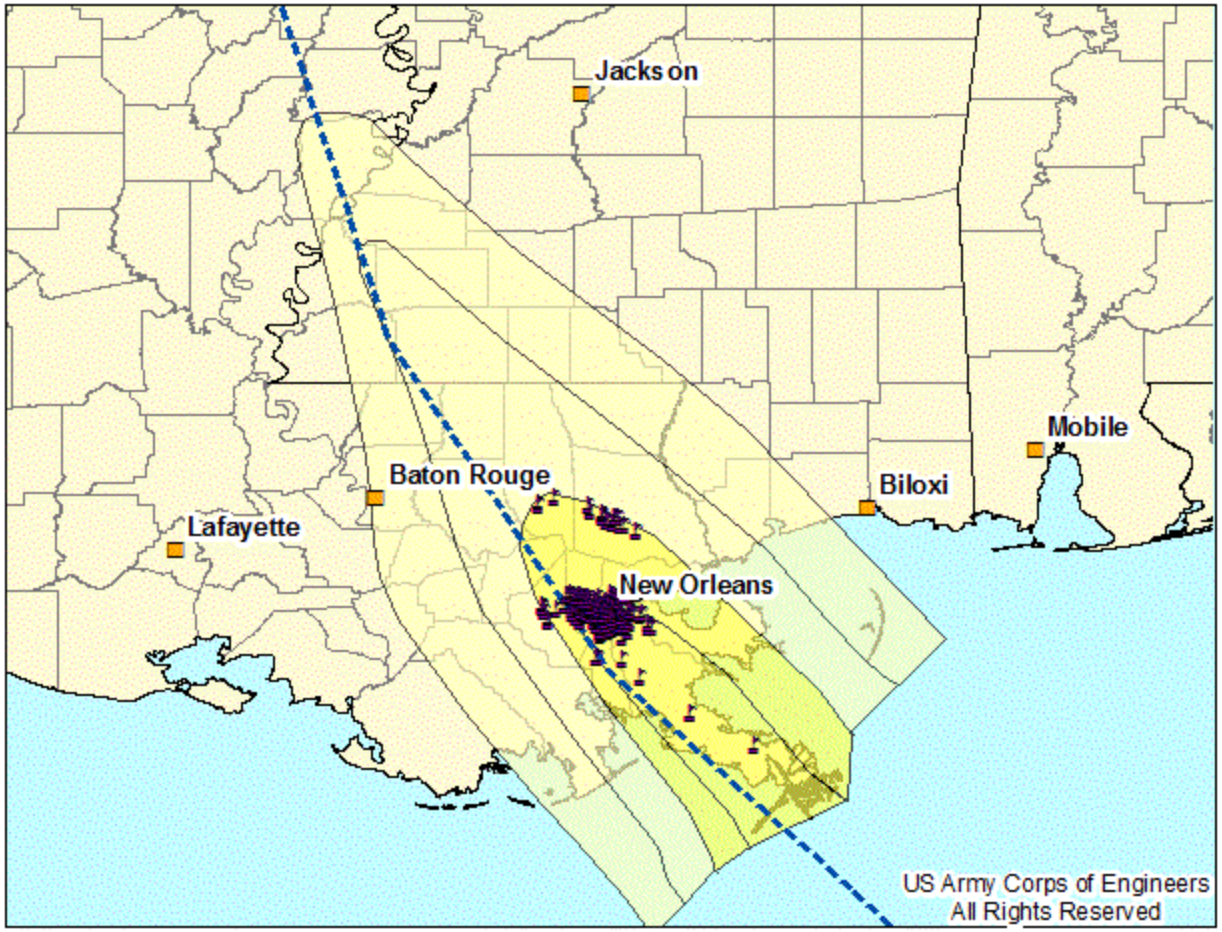
Hurricane Isaac Nursing Homes	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Schools

Landfall Expected In About 38 Hours

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

Louisiana - 266

Model results per County on following page

This model is based on a Category 1 storm making landfall on the Mississippi River Delta.

Schools

Forecast Track

Information provided on this page displays a Category 1 storm making landfall on the Mississippi River Delta. These projections are based on information from the NHC (0500 EDT 08/27/2012) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Schools	
Generated By: Siemsen, LRL 0700 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 18